

TITLE II ENVIRONMENTAL COMPLIANCE FACESHEET

Title of MYAP/CSR4 Activity: Agadez, Tahoua, and Tillaberi Food Security Initiative (ATTFSI)

CS name/Country/Region: Africare/Niger/West Africa

Funding Period: FY 2007 – FY 2011

FFP Grant Number: FFP-A-00-08-00003

Resource Levels:	Commodities (dollar equivalent, incl. monetization):	\$20,151,300
	Total metric tonnage request (Monet./FFW/DD):	17,015
	202(e) grant:	\$1,489,000
	ITSH grant:	\$2,470,700
	HG Contribution:	\$2,785,044

Statement Prepared by: Name: Dr Abraham USMAN Date: December 18, 2007
Revised: Africare/Niger CR: December 20, 2007

IEE Amendment (Y/N)? Y **Date of Original IEE:** N/A

Environmental Media and/or Human Health Potentially Impacted (check all that apply):
air *water* ✓ *land* ✓ *biodiversity* (specify) *human health* ✓ *other* *none*

Environmental Action(s) Recommended (check all that apply):

✓ 1. *Categorical Exclusion(s)*

 2. Initial Environmental Examination:

✓ *Negative Determination:* no significant adverse effects expected regarding the proposed activities, which are well defined over life of MYAP. IEE prepared:

✓ Without conditions (no special mitigation measures needed; normal good practices and engineering will be used)

✓ With conditions (special mitigation measures specified to prevent unintended impact)

 Negative Determination: no significant adverse effects expected, but multiple sites and sub-activities are involved that are not yet fully defined or designed.

 Conditions agreed to regarding an appropriate process of environmental capacity building and screening, mitigation and monitoring.

 Positive Determination: IEE confirms potential for significant adverse effect of one or more activities. Appropriate environmental review needed/conducted.

 EA to be / being / has been conducted. Note that the activities affected cannot go forward until the EA is approved.

 Deferral: one or more elements not yet sufficiently defined to perform environmental analysis; activities will not be implemented until amended IEE is approved.

Summary of Findings:

This IEE has been completed under the guidelines issued by USAID/DCHA/FFP and Africa Bureau to Title II Cooperating Sponsors implementing Multi Year Activities Programs (MYAP) for Environmental compliance procedures.

1. A Categorical Exclusion is recommended for the following activities: per 22 CFR 216.2 (c) (2) (i), (ii), (iii), (v), (viii), (x) and (xi):

1. Training of based communities organizations on local capacity for monitoring, warning and responding to risks and conflicts that threaten livelihood systems ;
2. Develop and implement a participatory rural appraisal program to increase the capacity of communities to identify and resolve their food security and health problems;
3. Form and support of community-based food security committees;
4. Enhance women participation and gender equity;
5. Train Village Nutrition Educators (VNEs), Food Security Volunteers, and Ministry of Health personnel to provide conditions enabling communities to develop, operate and maintain a community-based food security information system;
6. Develop a nutritional education curriculum (with IEC (Information Education Communication) materials focusing on improved infant and child feeding practices and prevention and treatment of diarrheal diseases;
7. Conduct monthly growth monitoring/educational sessions of children under five years old;
8. Mobilize the community through a series of meetings on good governance, nutrition education campaigns, early warning system and risk management;
9. Collaborate with communities and existing credit schemes to establish credit institutions to help communities to diversify and increase their incomes;

2. A Negative Determination without conditions is recommended for the following activities: per 22 CFR 216.3 (a) (3) (ii), (iii):

1. Training to introduce farmers to improved technology for farming and harvesting;
2. Training in agro-forestry practices (i.e. erosion control practices, water and soil conservation techniques, planting useful trees);
3. Training to increase livestock production and management, and to increase consumption of animal proteins;
4. Training in management of water resources and water systems (wells);

3. A Negative Determination with conditions is recommended for the following activities: per 22 CFR 216.3 (a) (2) (iii):

1. Rehabilitate/construct wells and ponds to provide water for farming and potable water;
2. Establish demonstration fields to implement sustainable agricultural practices including soil fertility improvement by using farmyard compost, manure, small quantities of

- organic fertilizers such as phosphate and urea, crop rotation, integrated pest management, and water conservation practices;
3. Increase crop production by improving crop management and reducing soil erosion and land degradation;
 4. Introduce techniques of food transformation and processing;
 5. Establish household gardens to increase consumption of nutrient-rich vegetables;
 6. Construction of cereal and animal feed input banks and warehouses;
 7. Promote tree planting and reforestation;
 8. Treatment of Childhood diseases, HIV/AIDS and Low risk maternity

1. The Conditions

Mitigating conditions are described in the ATTFSI – Environmental Monitoring and Evaluation Guidelines section of this IEE, and summarized here.

The potential environmental impacts of the small-scale planned activities related to increased agricultural activity, livestock production, access to potable water, construction of wells and ponds rehabilitation, food transformation, processing and conservation/storage and treatment of childhood diseases, HIV/AIDS and low maternity, will be mitigated through measures outlined in Section 4.0 of this IEE. ATTFSI intends to implement these conditions with the assistance of local partners, especially with the BEEIE (*Bureau d’Evaluation et d’Etudes d’Impact Environnemental*) office located in Niger’s Ministry in charge of Environment in a manner that would minimize all potential environmental impacts. To overcome this risk ATTFSI will make sure that water facilities will be implemented in accordance with SPHERE standards and relations USAID regulations and policies. All parties involved will be made aware of the mitigating requirements, which will be monitored and evaluated regularly.

New interventions introduced into the project other than those presented in this IEE will be reviewed in accordance with the guidelines and Environmental compliance procedures detailed in the USAID Bureau for Africa Environmental Guidelines for Small-scale Activities in Africa available in English and in French.

This IEE does not cover activities involving use or procurement of pesticides or activities involving procurement, transport, use, storage or disposal of toxic wastes. If in the future the project decides to use these types of material, a separate Pesticide Evaluation Report and Safe Use Action Plan (PERSUAP) will be submitted for approval. However, biological pesticides (e.g, neem oil) locally produced on-farm will be used to protect crops as recommended by ICRISAT.

For constructed new wells, a testing for arsenic and bacteriological contamination will be carried out. Sanitary Surveying will be used to spot any faults and deficiencies that could lead to the pollution of potable water in water-supply schemes. Africare will work with the local technical services particularly the Water Department and/or the Ministry of Health to conduct this testing.

For hydraulic interventions, the beneficiary communities with the assistance of the Program’s staff will establish a management committee to be responsible for operating and upkeep of the

constructed and/or rehabilitated infrastructures. Africare will train the members of these committees and sensitize them use save funds from their Income Generating Activities (IGA) to cover the needed maintenance costs. The allocated costs of Operations & Maintenance (O&M) will be deposited into the Village Development Funds as described in the MYAP Amendment Proposal.

In the development of Energy components, Africare will to refer to the USAID report: Fuel Efficient Stove Programs in IDP Setting- Summary Evaluation Report, Uganda for program design and monitoring and evaluation considerations.

http://www.usaid.gov/our_work/economic_growth_and_trade/energy/publications/EGAT0020.PDF

For sustainable soil improvement, Africare will encourage farmers to combine mineral fertilizers (if and when used) with measures to increase soil organic matter. These measures include mulching, composting and other agro forestry techniques (windbreaks, live fences and nitrogen fixing trees planting in agricultural lands). Africare will do this in collaboration with Research Institute and the decentralized State Agricultural Technical Services.

USAID APPROVAL OF ENVIRONMENTAL ACTION(S) RECOMMENDED:

Clearances:

Mission Director: 2/24 for MW Date: 8/3/08
Mark Wentling

Food for Peace Director: [Signature] Date: 8-12-08

Concurrence:

Bureau for Africa Environmental Officer: Brian Hirsch Date: _____

Approved: _____

Disapproved: _____

DCHA Bureau Environmental Officer: Erika Clesceri Date: 8/15/08
Erika Clesceri

Approved: ✓ with edits

Disapproved: _____

Optional Clearances:

FFP Officer: 2/24 (Carma Summer) Date: 8/8/08
Carolyn Hughes

Mission Food Aid Manager: _____ Date: _____

Regional Environmental Officer: Tim Resch Date: Aug 5, 2008
Tim Resch (Acting)

INITIAL ENVIRONMENTAL EXAMINATION

Program/Project Data:

Agadez, Tahoua, and Tillaberi Food Security Initiative (ATTFSI)
CS Name, Country/Region: Africare, Niger/West Africa

1.1 Background and Activity Description

The **Agadez and Tillaberi Food Security Initiative (ATFSI)** followed on the Agadez Food Security Initiative (AFSI) which was implemented from FY 01 – FY 05 and received a twelve month-cost extension October 1, 2005 –September 30, 2006 within the framework of Niger Food Security Initiative (NFSI). ATFSI is designed to assist the Government of Niger (GON), and the local communities of Agadez and Tillaberi in their common efforts to combat poverty by implementing lasting development programs in the regions of Agadez, and Northern Tillaberi. The total communes to be covered by the project is 10 (7 in Agadez and 3 in Tillaberi) with an estimated number of beneficiaries of 91,000 persons.

In summer 2007, there was an outbreak of insecurity related to armed conflicts in northern Niger marked by sporadic attacks on military and civilian targets, particularly in the Agadez region.

Due to insecurity in the Agadez region where the ATFSI project is located, it was decided to reduce interventions there and increase them in the region of Tahoua where 20 villages will be targeted.

Another factor undermining activities in Agadez is the banning of FFW activities which were a key activity in implementing rural infrastructures and NRM activities that were the basis of agricultural activities and related income generating and/or nutrition activities.

With the extension of the project to include Tahoua, the project has been renamed the **Agadez, Tahoua, and Tillaberi Food Security Initiatives (ATTFSI)**. The IEE determinations of the ATFSI (previous FY07 MYAP) remain fundamentally unchanged and valid for the FY08 Amended MYAP.

Major factors, apart from recurrent erratic climatic conditions, contribute to the poor performance of the agricultural sector and negatively impact household food insecurity. These include: (a) lack of essential inputs (improved seed varieties and tools, credit, fertilizers, animal feed and water for crops and animals); (b) deficient marketing and post-harvest storage infrastructure; (c) inappropriate farming and grazing practices (degradation of soil and deforestation); (d) misuse of natural resources to diversify narrow-based traditional food production system (e.g., limited exploitation of water resources for irrigation and animal production); (e) poorly trained human resources and ineffective extension services and lack of access to technologies ; (f) under-utilization of existing food and food products, and inappropriate nutrition practices; and, (g) very limited public and private investment in agricultural research.

Over the past 30 years, Niger's ranking on the UNDP human development index has changed very little: from 0.243 in 1975 to 0.292 in 2001, ranking Niger last out of 177 countries¹.

Based on the UNDP 2007/2008 Human Development Index, the HDI for Niger is 0.374 which gives the country a rank of 174th out of 177 countries.

Despite more than 30 years of consistent investment by the government into agriculture and livestock—and a 3.5% rate of economic growth in the last 5 years², the country's agricultural food production, food security, and GDP are highly vulnerable to inter and intra seasonal rainfall fluctuations, aggravated by the limited size of land suitable for crop production, post-harvest losses and attacks from various insects, rodents and birds.

Rural Agadez, Northwest Tahoua, and northern Tillabéri Regions are three of the poorest least food secure areas in Niger. Even in years with acceptable level and distribution of rainfall, domestic food production provides only a small fraction of local food needs, because of the narrow-base arable land and low-yield of traditional production systems. Households have traditionally coped with food shortages by relying on cash earned from the sale of livestock and livestock products and remittances from relatives living abroad. A series of shocks since the early 1970s has eroded livestock assets and skewed livestock ownership to the point that less than 10-15% of the rural population can be classified as even moderately food secure. The high malnutrition levels in the three regions are directly linked to this increased vulnerability and the region's weak state health services. All of these negative conditions contribute to the extreme poverty that has classified these three regions as "highly food insecure" by national standards and among the poorest of the country.

Relative to the national average of 63% of the population who live below the poverty threshold and despite the ongoing rice irrigation scheme around the Niger River in Southern Tillabéri, the poverty level of the region was the highest in Niger (80%) according to the 1994 survey. Agadez recorded a poverty level of 44%³, as a result of the mining in Arlit and the concentration of the population in the main cities of Agadez, Tchirozerine, Arlit and Bilma. Although there is no recent regional survey done by the GON, given the deterioration of most national social indicators as reported in the UNDP Human Development Report 2005, technical services and donors generally agree that the situation of the poorest rural populations in Northwest Tahoua, Northern Tillabéri and Agadez has drastically deteriorated as well.

The 2004 final evaluation of the first phase demonstrated a need for consolidating results attained and extending the activities. Furthermore, the GON requested Africare to expand its very successful experience in the Agadez region to the northern pastoral zone of Tillabéri, which features similar agro-climatic and socio-cultural characteristics.

Phase II of the project, ATTFSI, is a five-year activity designed to increase the ability of the local communities and selected government technical services to manage these and future risks

¹ UNDP, Human Development Report 2005, UNDP/ECONOMICA, 2005.

² Banque Africaine de Développement, Niger – Document de Stratégie par Pays 2002-2004, Juillet 2003

³ Direction de la Statistique et des Comptes Nationaux, Profil de la Pauvreté, Novembre 1994, UNDP/Ministère des Finances et du Plan.

and cope with periodic shocks by building stronger, more diversified livelihood systems based on local resources and demand. It will focus on consolidating improved food security in 60 Phase I villages in the Agadez region, and in 80 new villages (20 in Agadez; 20 in Tahoua, and 40 in Tillabéri). Four strategic objectives will support the goal of ATTFSI as described below.

1.2 Description of Activities

ATTFSI will engage in the following interventions in 80 extension (new) villages of the administrative communes of Agadez, Tahoua, and Tillabéri regions and 60 consolidation (old) villages in the Agadez Region. These interventions will fall under four major strategic objectives. The activities within each Strategic Objective and corresponding Intermediate Results are presented below:

1.2.1 **SO1:** Increase the consideration of risk and good governance in food security management in the targeted communities

IR1.1: Community capacity to design, implement and monitor activities that reduce their exposure to risk and decrease vulnerability enhanced

- Participatory selection of new intervention villages (new villages)
- Setting up community structures (FSC, CGV)
- Training/retraining community structures (CSA, CGV) in associative life and planning techniques
- Updating action plans
- Carrying out PRAs and AP in new villages
- Information and training of stakeholders (Communities, STD, town councils) close-out strategy and program sustainability
- training project staff in good governance
- Training CSA and CGV in good governance
- Organizing caravans to raise awareness of communities in democracy and good governance
- Opening (1 center/village) and implementing an adult literacy program
- Support to construct multi-purpose sheds
- Training program staff and technical services in gender and female leadership
- Organizing CCC sessions on promoting female leadership (2 sessions /village/year)
- Setting up and training female groups in community activities and management

Organizing exchange visits between female groups

IR 1.2: Local capacity for monitoring, warning and responding to risks and conflicts that threaten livelihood systems built

- Training/retraining of program and STD staff in SCAP/RU
- Setting up SCAP/RU committees
- Training SCAP/RU committees

- Organization of exchange visits between SCAP/RU committees
 - Support divisional SAP/GC committees in organizing meetings
 - Technical and logistical support in preparing divisional contingency plans
 - Training/retraining of cereal bank managers in basic principles of management (financial management, stock management)
 - Construction/rehabilitation of CB
 - Setting up/strengthening initial stock of CB
 - Training program staff in conflict management
 - Training town counselors and traditional chiefs in conflict management
- Training members of FSC and CGV in conflict management

IR1.3: Safety net and emergency aid programs that vulnerable households need to build assets and avoid asset erosion strengthened

- Adaptation/Preparation of FFT strategy
- Training/retraining FSC and school COGES in FFT strategy (types of cereals, beneficiaries, operating methods, norms,...)
- Setting up FFT food stocks FFT (n= metric tons)
- Setting up emergency stocks
- Preparing the FFH strategy (types of cereals, beneficiaries, operating methods, norms,)
- Training/retraining FSC and COGES Health/COSAN in FFH strategy

Setting up FFH food stocks

1.3.2 SO2: Enhance and protect livelihood strategies by sustainable improvements in agricultural, livestock and natural resource management practices.

IR 2.1 Community capacity for sustainable increases in livestock productivity improved.

- Identification and training of veterinary assistants in animal health and feeding
- Equipment of veterinary assistants
- Restocking of livestock
- Support to construct animal feed warehouses
- Setting up animal feed stocks
- Training of pilot producers in manufacturing feeding blocks and in techniques of storing fodder
- Training herders in techniques of processing animal products (milk, cheese, leather and skins, ...)
- Organization of exchange visits

IR2.2 Crop Productivity and resistance to drought increased

- Train pilot producers in composting and techniques of using mineral fertilizers
- Set up inputs and small agricultural equipments shops (BIA)
- Train phytosanitary brigade in fight against in alternative and biological fight
- Equip phytosanitary brigade
- Train pilot producers in agricultural techniques
- Train producers in vegetable gardening techniques
- Develop vegetable gardening sites
- **Training local seed multipliers**

IR 2.3: Natural resource management improved

- Adaptation/Preparation of FFT strategy

- Training/retraining FSC and school COGES in FFT strategy (Types of cereals, beneficiaries, mode of operation, norms,...)
- Setting up FFT food stocks (n= metric)
- Setting up emergency stocks and temporary aid
- Preparation of FFH strategy (Types of cereals, beneficiaries, mode of operation, norms,)
- Training/retraining FSC and COGES health/COSAN in FFH strategy
- Setting up food stocks
- Train management committees of pastures in the management of natural resources
- Create and train environmental protection committees
- Training in seedling production
- Produce seedlings
- Trainings in fruit tree production and nursery
- Support pilot producers with improved vegetable materials (date palm , desert apples)
- Support gum Arabic producers (acacia Senegal and acacia seyal)

Promote natural regeneration of protected species

IR 2.4: Availability and access to water sources for livestock and small-scale irrigation improved

- Construct/rehabilitate wells for irrigation
- Construct/rehabilitate wells for animals
- Construct water harvesting sills (Seuils d'épandage)
- Establish and Train animal's well users' association

1.3.3 SO3: Build human capacity by strengthening community-based health and nutrition systems, HIV/AIDS awareness and prevention

IR 3.1 Health structures' capacities to improve health services and HIV/AIDS awareness are reinforced.

- **Health District Worker Training**
 - Evaluate the quality of nutrition services in the CSI and health posts
 - Create a core of trained nutrition trainers in each health district
 - Train and retrain health workers on the design and monitoring of community based rehabilitation programs for moderately malnourished children
 - Train and retrain health agents on growth monitoring
 - Train and retrain health agents in one-on-one counseling techniques
 - Equip all health centers and health posts servicing project intervention villages with the basic training modules, supervision and monitoring tools and "aides memories" (execution manuals) that they need to train health agents, village volunteers and COSAN
- **Health District Community Outreach (*Foraines*)**
 - Strengthen community capacity to benefit from the health districts' community outreach (*foraine*) program by developing trained community volunteers who assist them in conducting their activities with a special focus on vaccination
- **Community Capacity Building**
 - Train and retrain the COSAN, the COGES and the FSC in health and nutrition
 - Facilitate the COSAN, COGES and FSC conducting public awareness campaigns
 - Facilitate the COSAN, the COGES and the FSC organizing meetings and workshops
- **HIV/AIDS activities**

To promote fight against STD/HIV/AIDS and sensitization campaigns geared at targeted groups

 - Training of health agents in communication techniques

- Training health committees in STD/HIV/AIDS prevention
- Training and sensitizing traditional communicators, religious leaders on STD/HIV/AIDS
- Ensuring the availability of condoms in medical centers and project's targeted villages.
- Carrying out sensitizing meetings for young people on STD/HIV/AIDS prevention
-

IR3.2: The nutritional status of women and children under five improved.

- Training EVN and TBA in monitoring the growth of children under 5 year and pregnant/nursing women.
- Equip CVS (EVS, EVN et TBA) with working equipment⁴
- Organize in the communities CCC campaigns (radio, songs, theater, etc.) on family planning, and mother and child health.
- Training/retraining TBA, EVN on CPN, ANJE, breastfeeding, feeding of lactating mothers,
- Support with medicines (vitamin A, iron, Mebendazole, Albendazole....) and food (millet, rice, oil, «niébé» beans...) to programs monitoring the growth of 0-36 months and pregnant/nursing women.

IR 3.3 Access to clean drinking water is increased

- Construction/rehabilitation of modern village wells and boreholes
- Setting up and training committees for managing modern water points
- Organization of CCC on hygiene and management of modern water points

1.3.4 SO4: Reduce vulnerability to risk and shocks by diversifying household income earning opportunities

IR4.1: Community-level marketing systems are strengthened

- Collect and disseminate on prices of main commodities and animals in local markets
- Use of BLU radio network in collaboration with the rural radios project
- Disseminate through local radios information on prices and market trends
- Organize and train producers in techniques of packaging and marketing

IR 4.2: Better transformation and conservation techniques are adopted

- Train producers in techniques of processing and conserving agro-pastoral products
- Organize exchange visits in centers of excellence
- Train and equip local craftsmen to manufacture agricultural equipments

⁴ The list of equipment types by activity is attached in the appendix ...

IR 4.3: Community access to financial services for micro-enterprise development is enhanced

- Set up/restructure and train credit committees
- Adapt credit methodology to the zones
- Raise the awareness of villages on the new credit system
- Fund for selected and prioritized micro enterprises in the villages
- Develop partnership between beneficiaries and mutual savings/credit associations in the region
- Provide vulnerable women with dairy cows/goats
- Set up grain mills
- Set up donkey carts
- Support producers with animals for drawing water from wells

1.4 Purposes and scope of IEE

This IEE is for the Title II MYAP, FY 2007 – FY 2011, prepared by Africare for the Agadez, Tahoua, and Tillaberi Food Security Initiative (ATTFSI) submitted to USAID/DCHA/FFP. It presents an initial review of reasonable foreseeable effects on the environment of proposed ATTFSI activities.

2. COUNTRY AND ENVIRONMENTAL INFORMATION

2.1 Locations Affected

Niger is a landlocked West African country bordered to the north by Algeria and Libya, to the west by Mali and Burkina Faso, to the east by Chad, and to the south by Benin and Nigeria. It has approximately 12.1 million inhabitants in 2005 with a population growth rate of 3.3% per year. To the north, the vegetation thins out and the land becomes sandy and desertification. The region of Agadez receives on average less than 165 mm of rainfall per year, while Tahoua and Northern Tillaberi receive between 200-250 mm per year. In the south, the rainfall is heavier and goes up to 1,200 mm per year. There are irrigated rice fields in the Niger River basin and traditional rice production in lowlands and lake beds.

The major environmental problems Niger is facing are related to desertification and recurrent drought. Natural local ecosystems, land, and water have deteriorated to a low level of productivity. The existing rivers basins have progressively dried up since the early 70s putting pressure on the diminishing water table for animal and human needs. Traditional land-use systems, while once well adapted to this Sahel region, are proving inadequate to the challenge. The land's carrying capacity is decreasing, and the country is losing its biomass, which threatens its nomadic and transhumant livestock. The country is further confronted with lack of energy resources, about 91% of energy consumed comes from wood; lack of a modern system of waste disposal (only 4% of waste is evacuated in urban area)⁵.

In Agadez, Tahoua, and Northern Tillaberi, land degradation, insufficient availability of water, deforestation and over grazing are well spread. The climate is hot and arid for nine months of the year, with an erratic rainy season spanning from June to mid-October in Tahoua and Tillaberi and from July to September in Agadez. The land is predominantly flat with laterite and sandy soil, and sand dunes (in Tahoua and Tillaberi). There is sparse natural vegetation composed of scrub brush and trees that are declining in number due to the combined pressures of drought, animal grazing, and human cutting. When rains occur, it is estimated that only 3% of the water is absorbed into the soil. The remaining water is lost to flooding and evaporation. Rainfall is irregular and has declined over the past 30 years. Although southern Tillaberi region includes the Niger River, Northern Tillaberi has very limited number of lakes and lowlands. These lakes dry up most of the year and the few which are permanent are experiencing heavy sand invasion and pressure for human and animal water during the dry season.

⁵ République du Niger, Consultation Sectorielle sur l'Environnement et la Lutte contre la Désertification, Juillet 2004, p. 8ry

Women often participate in multiple aspects of crop cultivation such as planting, weeding, and harvesting. Child feeding and care are done by women, and some local traditions and taboos have adverse effects on child nutrition and health. In addition to child care, women are solely responsible for food preparation which includes the very labor intensive process of pounding grain into fine flour using a mortar and pestle. Women sometimes engage in petty trading, but this is not a significant source of income. The phenomenon of degradation in Niger's northern zones is leading able bodied men to migrate from the villages to southern zones of Niger, to neighboring Arabic, and to the coastal countries in search of seasonal jobs.

The inhabitants of the project zones, Agadez, Tahoua, and Northern Tillaberi, are predominantly semi-nomadic. Livestock breeding is the principal activity in both project zones with very little crop production, particularly in Agadez. The importance of these activities has decreased due to two severe droughts over the last 3 decades. The primary crops cultivated are millet and sorghum in Tahoua and Tillaberi and wheat and millet in Agadez. The population of the 7 communes of Agadez participating in ATTFSI is estimated to be 190,000 and 110,000 in the three communes of Northern Tillaberi. The predominant ethnic origin of the people in Agadez is Tuareg while the people of Northern Tillaberi and Tahoua are predominantly Djerma, Hausas and Fulani.

2.2 National Environmental Policies and Procedures

The government of Niger (GON) considers environmental degradation a serious challenge to the country's economic development and to its poverty reduction strategy. The Ministry of Hydraulic, Environment and Fight against Deforestation is the main public actor assisted by the Ministry of Agriculture and the Ministry of Animal Resources. The GON also established the National Council for Environment and Sustainable Development (CNEDD) which is in charge of supervising the actual application of environmental protection measures. GON has adopted a National Plan of Environment for Sustainable Development.

To combat environmental damage, these Ministries with the assistance of various projects, have set forth strategies for capturing rainwater, slowing water runoff, and reforestation. For example, the GON has been encouraging farmers to build various less costly water retention systems such as dikes (stone lines), half moons, and trenches to capture the surface water and contribute to reforestation. The impact of these community-managed anti-erosion systems is rather encouraging. Other methods include village-level reforestation using indigenous trees, rainwater catchments and ponds in rural and sub-urban areas.

Africare will continue to collaborate with the departmental and communal levels technical services in charge of Agriculture, Livestock and Environment in the implementation of the activities. Careful attention has been paid to ensure that activities comply with the processes and procedures set out in the USAID Bureau for Africa Environmental Guidelines for Small Scale Activities in Africa (June 1996), as well as the guidelines set forth by the Government of Niger. Most activities involve agencies such as ICRISAT and services with an adequate awareness and a good knowledge of environmental issues. The project intends to promote community-based integrated pest management systems with community level IPM agents (Brigadiers Phytosanitaires).

3. EVALUATION OF ACTIVITY/PROGRAM ISSUES WITH RESPECT TO ENVIRONMENTAL IMPACT POTENTIAL

Many of the proposed activities are either training-oriented or small-scale and as such will have little or no adverse biophysical effect on the environment. Furthermore, as indicated below, the proposed interventions that could hold limited potential for adversely affecting the environment will be carefully implemented and monitored. In this section, the specific interventions will be described as well as the analysis of the potential environmental impact. The accompanying table summarizes the recommended threshold decisions for each intervention. Some activities are recommended for a Negative Determination with conditions.

3.1 Monetization and Food Distribution

This activity is the primary funding mechanism for ATTFSI. The process involves the importation and sale of agricultural products by sea and land transportation. It will also involve the distribution of food through food for training and targeted distribution programs determined in conjunction with the GON.

Probable Environmental Impact: There is no anticipated environmental impact associated with this intervention. Although there is no significant environmental direct impact, some mitigation measures related to increase in food availability are described in section 4.2.6 below.

3.2 Community Capacity Building (SO 1)

ATTFSI intends to strengthen the communities' capacity to analyze their food insecurity and nutrition problems and develop strategies to address them. This will be accomplished through technical training and hands-on demonstration projects. Skills development will focus on organization and management, monitoring and evaluation, sustainable agricultural techniques, sound hygiene and nutrition practices, including food preparation and transformation among other basic organizational skills, marketing and produce packaging and handling. The project will further develop community-based management system of risk and emergency programs including an Early Warning System known as SCAP/RU. This will involve the identification and monitoring of trigger indicators that could be indicative of rapidly deteriorating food security conditions, necessitating a modification in the type of support this program can provide (e.g. increasing the amount of direct distribution vs. farmer training during a period of no rainfall).

Probable Environmental Impact: No adverse environmental impact is anticipated. ATTFSI staff will work closely with the community organizations and the technical services of livestock and agriculture to train community members in sound agricultural and environmental development practices.

3.3 Livestock, Agricultural Production/Hydraulic Interventions (SO 2)

This village-based activity will consist of training participants in sustainable farming practices to maximize soil fertility, and conserve water. Examples of specific training themes include integrated pest management, sound agro-forestry techniques to combat and prevent further erosion and others. To accompany this training, there will also be demonstration plots (1-2 ha) in each village where these techniques will be taught. Necessary measures will be taken to minimize any negative potential environmental impacts of demonstration plots.

Animal husbandry will be mainly extensive grazing with limited quantities of salt to complement animal diet. ATTFSI will provide improved seeds to increase farmers' yields. The seeds will be limited to crops currently grown in the area. ATTFSI will rehabilitate existing wells as needed and build new wells for livestock and gardening. In villages where new wells will be built, necessary measures such as the construction of anti-mud cemented paving will be taken to minimize any negative potential impacts. No major land clearing will be undertaken for construction. The feeder roads identified for rehabilitation will be done manually and will require no land clearing and/or tree cutting.

ATTFSI will not fund activities involving assistance for the use and/or procurement of pesticides without submitting the proper documentation to the USAID/West Africa Mission and USAID/DCHA.

Probable Environmental Impact: No major environmental impacts are anticipated. ATTFSI will use existing farmland for demonstration plots and no forest or natural areas will be cleared. A restoration plan including replanting of trees and grass cover will be implemented in each area where a hydraulic intervention has altered the physical environment.

Promotion of household vegetable gardens – Households will be encouraged to grow vegetables in their family gardens to provide nutrient-rich foods such as leafy vegetables. The goal is to improve the diet of children who are being weaned from breastfeeding as well as the diet of the entire family, and to provide an income earning source for the family. These gardens will also provide the opportunity for families to implement techniques that would increase soil fertility and conserve water as well.

Probable Environmental Impact: As this activity focuses on small household gardens, no significant negative impact is expected.

For hydraulic interventions, the beneficiary communities with the assistance of the Program's staff will establish a management committee to be responsible for operating and upkeep of the constructed and/or rehabilitated infrastructures. Africare will train the members of these committees and sensitize them use save funds from their Income Generating Activities (IGA) to cover the needed maintenance costs. The allocated costs of Operations & Maintenance (O&M) will be deposited into the Village Development Funds as described in the MYAP Amendment Proposal.

For sustainable soil improvement, Africare will encourage farmers to combine mineral fertilizers (if and when used) with measures to increase soil organic matter. These measures include mulching, composting and other agroforestry techniques (windbreaks, live fences and nitrogen fixing trees planting in agricultural lands). Africare will do this in collaboration with Research

Institute and the decentralized State Agricultural Technical Services.

3.4 Nutrition, Health, Hygiene Education and HIV/AIDS awareness (SO 3)

1. Training and education campaigns -- The main activities under this intervention focus on training and outreach within nutrition and hygiene education. They include:

- Formation of, and support to, Food Security Committees;
- Training of Village Nutrition Educators, Village Health Agents and Traditional Birth Attendants;
- Development of nutrition and hygiene education curriculum;
- Training on hygiene and water sanitation. This component will be implemented throughout the life of project during animation sessions conducted by field agents and supervisors.

Probable Environmental Impact: None is expected from this activity.

2. Transformation and preparation of food – Culinary demonstrations will take place involving small groups of mothers to focus on enriched weaning foods and increased consumption of protein and vegetables. The existing rural radios in Agadez will be used to reinforce messages taught at those training and demonstration sessions. Simple transformation technologies for prolonging the shelf life of products and capturing value-added to boost income for improved households' nutrition and well being will be introduced to women. The project will also rehabilitate malnourished children in the "Hearth" activity and provide some foods to children of very poor households to strengthen the children's chance of recovering from malnutrition after the "Hearth" training.

3. Monitoring growth of children under five – Monthly weighing of under-five children will be carried out by staff. The goal is to demonstrate to mothers the effect of improved diet and feeding techniques on their children's growth.

Probable Environmental Impact: No adverse impact is expected.

4. Treatment of Childhood diseases, HIV/AIDS and Low Risk Maternity: These activities will be undertaken under the existing norms and procedures of the Ministry of Health and the local health District. Village Health Volunteers (community health agents and traditional birth attendants) will be trained and equipped to implement these activities under the supervision of the health post. The health post will train volunteers in the use of necessary essential drugs and aids to diagnose and treat diseases such as malaria, dehydrating diarrheas and intestinal parasitic infections. It will also facilitate the provision of drugs to HIV/AIDS infected persons. The project will support GON's efforts towards better health services provision to the most vulnerable groups by supporting *community outreach (foraines)* and vaccination campaigns.

Probable Environmental Impact: No major environmental impacts are anticipated since the nature of the drugs involved is well known and their manipulation is limited and would not be harmful to the volunteers. Appropriate training will be provided to educate volunteers on manipulation and sanitation issues. TBAs will be intensively trained and supervised by health

agents. Furthermore, children and women benefiting from the treatment will not be exposed to any serious and hazardous impact beyond health post control. Vaccinations will be performed by the mandated GON health service. All materials used for vaccinations will be conserved by the GON mobile teams and disposed accordingly to the recommended practices.

5. Provide access to potable water – This activity will involve construction of wide diameter wells to provide access to potable water; this will be accompanied by training in proper oral re-hydration techniques and drinking water utilization.

Probable Environmental Impact: Wells construction has the potential to alter the physical environment and cause degradation, which promotes erosion. Specific measures have been outlined in mitigation plans to restore physical alteration to the surrounding environment to prevent erosion and other problems. For example, the project will work with existing community organizations to manage water resources including wells as well as any water interventions. All wells will be constructed with cement. Wells for potable water will be cement concrete-lined wells with 180 cm diameters.

For constructed new wells, a testing for arsenic will be carried out. Africare will work with the local technical services particularly the Water Department and/or the Ministry of Health to conduct this testing.

3.5 Marketing, transformation and Diversification of Income (SO 4)

Beneficiaries will be trained and assisted to improve their conservation techniques, facilitate access to improved storage systems that would limit damages to their harvest. They will also be trained in improved harvesting, transformation (drying, improved cooking) and handling technology for crops and vegetables such as tomatoes, okra, onions and tree crops such as date palm and gum Arabic, and finally for animal by-products such as milk and skin and hides. The project will focus on training women and other interest groups which are already involved in these types of activities to improve their way of doing business.

The training will be complemented with appropriate temporal and special market information to strengthened marketing opportunities for farmers. Whenever possible, the project will facilitate commercial partnerships with private and cooperative traders (UCMA, UCMT⁶) to provide farmers with raw materials or to market products nationally and internationally. The project will further support villagers' initiatives with credit facility by encouraging the creation of Village Saving and Credit Associations and by supporting income generating activities for women.

Environmental impact: No significant negative impact is expected.

4. RECOMMENDED MITIGATION ACTIONS (INCLUDING MONITORING AND EVALUATION)

4.1 Recommended IEE Determination

⁶ UCMA: Union des Coopératives Maraîchères de Agadez;
UCMT : Union des Coopératives maraîchères de Tchirozerine

Based on the environmental review presented in this IEE, the following determinations were made:

A Categorical Exclusion is recommended for the following activities: per 22 CFR 216.2 (c) (2) (i), (ii), (iii), (v), (viii), (x) and (xi): 1) Monetization of agricultural commodities and provide market prices to farmers; Develop and implement a participatory rural appraisal program to increase the capacity of communities to identify and resolve their food security and health problems; 2) Form and support community based food security committees; 3) Enhance women's participation and gender equity; 4) Train Village Nutrition Educators (VNEs), Food Security Volunteers, and Ministry of Health personnel to provide conditions enabling communities to develop, operate and maintain a community-based food security information system; 5) Develop a nutritional education curriculum (with IEC materials) focusing on improved infant and child feeding practices and prevention and treatment of diarrhea diseases; 6) Conduct monthly growth monitoring/educational sessions of children under five years old; 7) Mobilize the community through a series of meetings on good governance, nutrition education campaigns, early warning system and risk management; and, 8) Collaborate with communities and existing credit schemes to establish credit institutions to help communities to diversify and increase their incomes.

A negative determination without conditions is recommended for the following activities: per 22 CFR 216.3 (a) (3) (ii), (iii): 1) Training to introduce farmers to improved technology for farming and harvesting; 2) Training in agro-forestry practices (i.e. erosion control practices, water and soil conservation techniques, planting useful trees 3) Training to increase livestock production and management, and to increase consumption of animal proteins; 4) Training in management of water resources and water systems (wells);

A Negative determination with conditions is recommended for the following activities: per 22 CFR 216.3 (a) (2) (iii): 1) Rehabilitation/construction of wells and ponds to provide water for farming and potable water; 2) Establish demonstration fields (64) - 0.25 hectares – to implement sustainable agricultural practices including soil fertility improvement by using farmyard compost, manure, small quantities of organic fertilizers such as phosphate and urea, crop rotation, integrated pest management, and water conservation practices; 3) Increase crop production by improving crop management and reducing soil erosion and land degradation; 4) Introduce techniques of food transformation and processing; 5) Establish household gardens to increase consumption of nutrient-rich vegetables; 6) Construction of cereal and input banks and warehouses; 7) Promote tree planting and reforestation; 8) Treatment of childhood diseases, HIV/AIDS and low risk maternity.

The proposed conditions outlined below are intended to make certain that the planned activities are implemented in a manner that will reduce potential negative impacts.

4.2 Mitigation Measures

Some of the proposed activities will require mitigation measures to minimize potential negative environmental impacts. For all of the major categories of interventions, the following measures have been recommended. The progress of these activities will be monitored regularly with some periodic evaluation.

4.2.1 Mitigation measures for agricultural production activities

Working closely with partners such as government agricultural extension, engineering and livestock services and other organizations in the region, ATTFSI will provide training to farmers in agricultural techniques that prevent land degradation and enhance soil fertility and water conservation. The themes that will be emphasized are: land stewardship, resource conservation, integrated pest management, etc. Specific techniques in soil erosion control and soil fertility building such as composting, and agro-forestry will be implemented in the demonstration plots so that community members can have hands-on experiences after training. Integrated pest management control was successfully promoted during the first phase of ATTFSI by training community-based IPM officers (*Brigadiers phytosanitaires*)

The idea here is to train local *phytosanitary* (plant protection) agents in the use of small equipment to protect plants (see MYAP narrative). ATTFSI will train local phytosanitary agents in integrated Pest Management, including safe practices of utilizing only USEPA-approved and host-government approved pesticides as well as strongly encouraging the use of protective clothing. The use of *neems* (*Azadirachta indica*) oil will be encouraged to protect plants from pests. Africare will establish a partnership with ICRISAT for the research aspects and with INRAN (*Institut National de Recherche Agronomique*) for the extension aspects related to the use of neems oil as an integrated pesticide.

ATTFSI will continue to promote the control of pest infection of crops by enhancing this system in Agadez and developing the same in Tahoua and Tillabéri. ATTFSI will work with the Divisional Agricultural services to train farmers in farming techniques such as composting, crop rotation, which at the same time will improve soil fertility. Improved and local varieties of seeds for vegetables will be promoted with the technical assistance of ICRISAT. Partnership will be set up with ICRISAT for the promotion of tree planting activities, agro-forestry techniques. . Africare will also work with ICRISAT to establish tree nurseries and to promote nitrogen-fixing trees planting and fruit trees production. This partnership will include procurement of seeds and training of the producers.

These seeds have been tested on existing gardens and their production by farmers promoted during the first phase of the project.

ATTFSI will also engage in tree nurseries which will be village-run. The seedling trees will be planted in the demonstration fields and/or designated wood plots by the communities. Selected species will be chosen to enhance the quality of the soil (i.e. nitrogen fixing plants) and mitigate soil erosion and invasion of land by sand. The partnership with ICRISAT will include training of communities in improved nursery techniques (grafting, seedling, direct seeding, etc.) to easily grow multi-purpose trees.

4.2.2 Mitigation measures for improved livestock production

Efficient livestock management will be crucial to preventing destruction of agricultural crops, and overgrazing and destruction of trees. Fodder cultivation will be promoted in family plots to provide extra food for the animals, particularly for animal fattening. To promote growth and better nutrition, ATTFSI will work with local livestock services to continue periodic inoculations

and de-worming campaigns already undertaken by this service and private veterinarians. Sanitation interventions will also consist of manure management which will be included in the compost and also to protect drinking water resources. Wells for animal watering will be constructed in places assigned for animals watering and will be isolated from wells constructed for human consumption. Training will be provided in collaboration with the Belgium-managed ranch in Filingué division to promote the breeding of local selected species proven to perform well in the local environment such as Azawak cattle. This training will also include type of feeding forage, the overall sanitation plan including manure management and pen construction from locally-available materials. Compost pits will be recommended only in villages where water is sufficiently available.

4.2.3 Mitigation measures for hydraulic interventions

ATTFSI will first evaluate each village to determine which wells can be rehabilitated before launching the construction of new ones. In the case of new construction, restoration such as replanting of trees and grass cover will be implemented after construction. All wells rehabilitation and construction will include appropriate drainage systems to deter formation of stagnant water. Operation and maintenance training will be provided through the establishment of local committees. In summary, crucial environmental concerns will be taken into consideration in the planning of such interventions. The sites, future use of the surrounding land, water quality, and soil and erosion problems will be examined. Well water will be tested for microbiological content.

Wells for animals will be constructed in places assigned for animals watering and will be isolated from wells constructed for human consumption.

The project will continue to construct small scale gardens for the production of vegetables by women's associations and by a few households in the Aïr, Tahoua, and Tillabéri regions. Also ponds and koris will be rehabilitated and used for crop production, animal feeding and pastoral water. This program will benefit from the technical support of ICRISAT, the Divisional Engineering services and the Directorate of Agriculture and will conform to the norms of the Ministry. ATTFSI will encourage the utilization of manure to improve the yield of the gardens. Lowland and ponds will be identified and rehabilitated under the supervision of the regional directorate of water and engineering. There will be no major harm to the existing forest. ATTFSI will recommend the same system of collecting firewood outlined in the UNHCR SPHERE Standards. The population will be encouraged to collect only deadwood or boughs from annual shrubs which have the specificity to regenerate easily. Priority will be placed on planting trees in degraded lands, near the houses and where the community collects its essential firewood for subsistence.

ATTFSI will monitor waterborne diseases around the developed sites and promote good health and hygiene practices, particularly against malaria under the malaria control program (SO3). For all constructed new wells, a testing for arsenic will be carried out. Africare will work with the local technical services particularly the Water Department and/or the Ministry of Health to conduct this testing.

For hydraulic interventions, the beneficiary communities with the assistance of the Program's staff will establish a management committee to be responsible for operating and upkeep of the constructed and/or rehabilitated infrastructures. Africare will train the members of these committees and sensitize them use save funds from their Income Generating Activities (IGA) to cover the needed maintenance costs. The allocated costs of Operations & Maintenance (O&M) will be deposited into the Village Development Funds as described in the MYAP Amendment Proposal.

4.2.4 Mitigation measures for transformation, conservation and packaging

Transformation/processing of food will be based on improved equipment such as dryers and firewood saving stove. Training in resource conservation and appropriate technology demonstrations for alternative fuel sources will be provided. In order to promote the processing of milk and supply milk products in the villages and major cities of the region, women will be trained in the utilization of small scale processing equipment. The fabrication and installation of the equipment will take into account households' environment.

4.2.5 Mitigation measures for nutrition, treatment of childhood diseases, HIV/AIDS and low risk maternity

ATTFSI will promote the use of fuel efficient stoves (i.e. clay stoves) during food preparation demonstration sessions. The community health agents will be trained and frequently supervised by the health post and the project. The traditional birth attendants (TBAs) too will be supervised by the health post. ATTFSI will ensure that the volunteers are well trained and the appropriate supervision undertaken by the health district. Africare will ensure that all disposable health materials are destroyed after use at the collaborating health clinics (CSI).

4.2.6 Mitigation measures for food distribution

ATTFSI will promote the use of improved metallic stoves (using fuel) and improved traditional stoves (using much less firewood). Improved stoves can drastically reduce wood consumption through increased efficiency. Experience from numerous Africare implemented projects has shown that households using improved locally appropriate stoves can reduce their firewood needs by more than 50%. These stoves are fuel efficient and suitable for environmental conservation and are made from locally available materials and thus are fully sustainable. These models reportedly offer an 80% saving in fuel consumption. The use of improved stoves in this manner will free household members from the task of harvesting locally available resources and will free time for use in other productive endeavors. The project will train the beneficiaries to produce improved traditional stoves and will assist them to produce units for their use.

In addition, ATTFSI will train communities in the use of improved wood harvesting techniques such as pruning and use of shrubs which have the capability to regenerate annually.

4.3 Monitoring and Evaluation objectives

The broad objective of the environmental monitoring system is to provide the basic information for the staff including (project managers, trainers, field agents) and beneficiaries on changes in

environmental factors resulting from ATTFSI interventions associated with increased agricultural production and water development schemes.

Specific objectives include: (i) Provide qualitative and quantitative data and information on selected environmental components likely to be affected by activities such as agricultural production, livestock production, and water development; (ii) review of the implications of those activities on natural resource management and on the environment and develop options for more efficient management; (iii) examine the effects of impacts of project activities and their derived demands on the natural resource base; (iv) assess the present status of resource availability, roles of resource use and current impact of such use on resource activity; to promote concepts of sustainable management and protection of the natural resource base; (v) create a data base on selected environmental parameters of the ATTFSI intervention villages that would be useful for future use by other ATTFSI activities and other partners.

5. SUMMARY OF FINDINGS

This IEE has been completed under the guidelines issued by USAID/DCHA/FFP and Africa Bureau to Title II Cooperating Sponsors implementing Multi Year Activities Programs (MYAP) for Environmental compliance procedures.

5.1 Environmental Determinations

1. A Categorical Exclusion is recommended for the following activities: per 22 CFR 216.2 (c) (2) (i), (ii), (iii), (v), (viii), (x) and (xi):

- 1) Develop and implement a participatory rural appraisal program to increase the capacity of communities to identify and resolve their food security and health problems;
- 2) Form and support of community based food security committees;
- 3) Enhance women's participation and gender equity;
- 4) Train Village Nutrition Educators (VNEs), Food Security Volunteers, and Ministry of Health personnel to provide conditions enabling communities to develop, operate and maintain a community-based food security information system;
- 5) Develop a nutritional education curriculum (with IEC materials) focusing on improved infant and child feeding practices and prevention and treatment of diarrhea diseases;
- 6) Conduct monthly growth monitoring/educational sessions of children under five years old;
- 7) Mobilize the community through a series of meetings on good governance, nutrition education campaigns, early warning system and risk management; and,
- 8) Collaborate with communities and existing credit schemes to establish credit institutions to help communities to diversify and increase their incomes.

2. A negative determination without conditions is recommended for the following activities: per 22 CFR 216.3 (a) (3) (ii), (iii):

- 1) Monetization of agricultural commodities and provide market prices to farmers;
- 2) Training to introduce farmers to improved technology for farming and harvesting;

- 3) Training in agro-forestry practices (i.e. erosion control practices, water and soil conservation techniques, planting useful trees);
- 4) Training to increase livestock production and management, and to increase consumption of animal proteins; and,
- 5) Training in management of water resources and water systems (wells).

3. A Negative determination with conditions is recommended for the following activities: per 22 CFR 216.3 (a) (2) (iii):

- 1) Rehabilitation/construction of wells and ponds to provide water for farming and potable water;
- 2) Establish demonstration fields to implement sustainable agricultural practices including soil fertility improvement by using farmyard compost, manure, small quantities of organic fertilizers such as phosphate and urea, crop rotation, integrated pest management, and water conservation practices;
- 3) Increase crop production by improving crop management and reducing soil erosion and land degradation;
- 4) Introduce techniques of food transformation and processing;
- 5) Establish household gardens to increase consumption of nutrient-rich vegetables;
- 6) Construction of cereal and input banks and warehouses;
- 7) Promote tree planting and reforestation;
- 8) Treatment of Childhood diseases, HIV/AIDS and Low risk maternity

5.2 Conditions

The potential environmental impacts of the small-scale planned activities related to increased agricultural activity, livestock production, access to potable water, construction of wells and ponds rehabilitation, food transformation, processing and conservation/storage and treatment of childhood diseases, HIV/AIDS and low maternity, will be mitigated through measures outlined in Section 4.0 of this IEE. Africare intends to implement these conditions with the assistance of local partners in a manner that would minimize all potential environmental impacts. All parties involved will be made aware of the mitigating requirements, which will be monitored and evaluated regularly. Africare will establish a partnership with the BEEIE (Bureau d’Evaluation et d’Etudes d’Impact Environnemental) office located in the Niger’s Ministry in charge of Environment. The BEEIE will assist Africare to perform a geophysical study to determine the most appropriate locations of wells to minimize risks of water pollution from latrines and other sources of pollution.

New interventions introduced into the project other than those presented in this IEE will be reviewed in accordance with the guidelines and Environmental compliance procedures detailed in the USAID Bureau for Africa Environmental Guidelines for Small-scale Activities in Africa.

This IEE does not cover activities involving use or procurement of pesticides or activities involving procurement, transport, use, storage or disposal of toxic wastes. If in the future the project decides to use these types of material, a separate Pesticide Safe Use Action Plan (PERSUAP) will be submitted for approval.

For all constructed new wells, a testing for arsenic will be carried out. Africare will work with the local technical services particularly the Water Department and/or the Ministry of Health to conduct this testing.

For hydraulic interventions, the beneficiary communities with the assistance of the Program's staff will establish a management committee to be responsible for operating and upkeep of the constructed and/or rehabilitated infrastructures. Africare will train the members of these committees and sensitize them use save funds from their Income Generating Activities (IGA) to cover the needed maintenance costs. The allocated costs of Operations & Maintenance (O&M) will be deposited into the Village Development Funds as described in the MYAP Amendment Proposal.

Summary Table: Synopsis of Environmental Decisions for ATTFSI MYAP Activities: FY 07-FY 11

Geographic attributes and operating principles: USAID-funded MYAP activities are sited in Agadez, Tahoua, and Tillaberi, Niger Republic. The targeted Communes of Agadez, Tahou, and Tillaberi will receive interventions.

SO 1 : Increase the consideration of risk and good governance in food security management in the targeted communities (Ag=Agadez ; T=Tillaberi ; p=persons ; v=village)

Intermediate Results	Activities	Location	Site	Scale and Quantity	Unit	% of Title II	Expected JEE Determination	Reg. 216 Citation
IR 1.1: Community capacity to design, implement and monitor activities that reduce their exposure to risk and decrease vulnerability is enhanced	1.1.1 Establish appropriate village level activities for reducing food insecurity					3%		
	1.1.1.a. Villages—1st Year	Agadez, Tahoua, and Tillab.						
	a. Sensitization of villagers	Agadez, Tahoua, and Tillab.	Villages	140	Groups		Categorical Exclusion (CE)	216.2 (c) (2)
	b. Establishment of intervention committees (FSC, VMC)	Agadez, Tahoua, and Tillab.	Villages	140	Committees		Categorical Exclusion (CE)	216.2 (c) (2)
	c. 1 st Training of the committees in participatory approach (PRAs and action plan preparation)	Agadez, Tahoua and Tillab.	Villages	140	Groups		Categorical Exclusion (CE)	216.2 (c) (2)
	1.1.1.b.2 nd Year Villages	Agadez, Tahoua, and Tillab.	Villages					
	d. Training and recycling of Committee members	Agadez, Tahoua, and Tillab.	Villages	140	Committees		Categorical Exclusion (CE)	216.2 (c) (2)
	e. Revision of PRAs and Action Plans	Agadez, Tahoua, and Tillab.	Villages	140	Committees		Categorical Exclusion (CE)	216.2 (c) (2)
	f. Organization and strengthening of existing and new groups and associations	Agadez, Tahoua, and Tillab.	Villages	800	Groups		Categorical Exclusion (CE)	216.2 (c) (2)
	g. Village development fund	Agadez, Tahoua and Tillab.	Villages	140	Groups		Negative Determination (ND)	216.3 (a) (3)
	1.1.1.c. Preparation of exit strategy							
	h. Training of villagers in self-evaluation and preparation of project exit.	Agadez, Tahoua, and Tillab.	Villages	140	Villages		Categorical Exclusion (CE)	216.2 (c) (2)

Intermediate Results	Activities	Location	Site	Scale and Quantity	Unit	% of Title II	Expected IEE Determination	Reg. 216 Citation
		Tilab.						
	1.1.2. Build community leaders (CSA, CGV, groups) capacity to practice good governance		Villages			3%		
	a. Training of FSC and VMC in good governance	Agadez, Tahoua, and Tilab.	Villages	1960	Groups		Categorical Exclusion (CE)	216.2 (c) (2)
	a.1. Module 1 :principles of democracy	Agadez, Tahoua, and Tilab.	Villages	1960	Groups		Categorical Exclusion (CE)	216.2 (c) (2)
	a.2. Module 2 :equity and gender	Agadez, Tahoua, and Tilab.	Villages	90	Groups		Categorical Exclusion (CE)	216.2 (c) (2)
	b. Intensive Sensitization on issues related to good governance and democrats (12 sessions per village per year) (IEC)	Agadez, Tahoua, and Tilab.	Villages	1680	Sessions		Categorical Exclusion (CE)	216.2 (c) (2)
	c.1. training of staff on legal issues—training of trainers	Agadez, Tahoua, and Tilab.	Villages	44	Staff		Categorical Exclusion (CE)	216.2 (c) (2)
	c.2. training of field agent		Villages	44	Staff		Categorical Exclusion (CE)	216.2 (c) (2)
	1.1.3. Support basic literacy training for the leaders of local community organizations	Agadez, tahoua, and Tilab.	Villages	420	Farmers	3%	Categorical Exclusion (CE)	216.2 (c) (2)
	a. Creation, rehabilitation and support to vocational training centers(per village)	Agadez, Tahoua, and Tilab.	Villages	240	Center		Negative Determination with conditions (NDWC)	216.3 (a) (2)
	b. training (1 cycle= 4 months)	Agadez, Tahoua, and Tilab.	Villages	800	Farmers		Categorical Exclusion (CE)	216.2 (c) (2)
	c. Post-training activities and support to village and commune-level libraries		Villages	140	Villages		Categorical Exclusion (CE)	216.2 (c) (2)
	d. training and recycling of trainers (cycle of 15 days)	Agadez, Tahoua, and Tilab.	Villages	120	Trainers		Categorical Exclusion (CE)	216.2 (c) (2)
	e Distribution of food to stimulate the participation women in sessions	Agadez, Tahoua, and Tilab.	Villages	120	villages		Categorical Exclusion (CE)	216.2 (c) (2)
	1.1.4. Develop Female Leadership	Agadez, Tahoua, and Tilab.	Villages	1600	sessions	3%	Categorical Exclusion (CE)	216.2 (c) (2)
	a. Training of field agents, supervisors and technical	Agadez,	Villages	44	Staff		Categorical	

Intermediate Results	Activities	Location	Site	Scale and Quantity	Unit	% of Title II	Expected IEE Determination	Reg. 216 Citation
	services staff in gender and women leadership ⁷	Tahoua, and Tilab.					Exclusion (CE)	216.2 (c) (2)
	b. sensitization on women leadership promotion (IEC) (6 sessions per village per year)	Agadez, Tahoua, and Tilab.	Villages	140	Villages		Categorical Exclusion (CE)	216.2 (c) (2)
	c. Creation and support to women associations in community activity and management (see SO4)	Agadez, Tahoua, and Tilab.	Villages	TBD	Groups		Categorical Exclusion (CE)	216.2 (c) (2)
	d. Exchange visits between women associations	Agadez, Tahoua, and Tilab.	Villages	16	trips		Categorical Exclusion (CE)	216.2 (c) (2)
IR 1.2: Local capacity for monitoring, warning and responding to risks and conflicts that threaten livelihood systems	1.2.1. Support the Creation of Community-based Early Warning and Emergency Response Systems SSCAP/RU)					3%		
	(1) Community level							
	a. Training and recycling of Africare staff on SCAP/RU		Niamey, Agadez and Tilab	44	Staff		Categorical Exclusion (CE)	216.2 (c) (2)
	b. Establishment of SCAP/RU committees	Agadez, tahoua, and Tilab.	Villages	90	Committees		Categorical Exclusion (CE)	216.2 (c) (2)
	c. Training of SCAP/RU committees	Agadez, Tahoua, and Tilab.	Villages	90	Committees		Categorical Exclusion (CE)	216.2 (c) (2)
	d. Creation of a community emergency stock	Agadez, Tahoua, and Tilab.	Villages	140	Stock		Negative Determination with conditions (NDWC)	216.3 (a) (2)
	e. Exchange visits	TBD	Villages	16	trips		Categorical Exclusion (CE)	216.2 (c) (2)
	f. Participatory diagnosis and identification of a community-based early warning monitoring system	Agadez, Tahoua, and Tilab.	Villages	75	Groups		Categorical Exclusion (CE)	216.2 (c) (2)
	(2) Communal and Departmental Level							
	g. Diagnosis	Agadez, Tahoua, and Tilab.	Villages	80	villages		Categorical Exclusion (CE)	216.2 (c) (2)
	h. Support to communal and departmental SCAP/RU framework	Agadez, Tahoua, and Tilab.	Villages	TBD			Categorical Exclusion (CE)	216.2 (c) (2)
	i. Support to task forces (technical services/project and partners)	Agadez, Tahoua, and Tilab.	Villages	TBD	TBD		Categorical Exclusion (CE)	216.2 (c) (2)

Intermediate Results	Activities	Location	Site	Scale and Quantity	Unit	% of Title II	Expected IEE Determination	Reg. 216 Citation
	j. training of communal and departmental task forces	Agadez, Tahoua, and Tilab.	Villages	15	Task forces		Categorical Exclusion (CE)	216.2 (c) (2)
	k. Training of Afrique and technical services staff	Agadez, Tahoua, and Tilab.	Villages	TBD	Person		Categorical Exclusion (CE)	216.2 (c) (2)
	(3) Regional Level							
	l. Support to regional task forces	Agadez, Tahoua, and Tilab.	Villages	TBD	Groups		Categorical Exclusion (CE)	216.2 (c) (2)
	m. Support to the preparation of departmental contingency action plans x	Agadez, Tahoua, and Tilab.	Villages	TBD	Groups		Categorical Exclusion (CE)	216.2 (c) (2)
	1.2.2 Strengthen Community Capacity to Create, Rehabilitate and Manage Cereal Banks	Agadez, Tahoua, and Tilab.	Villages	TBD	Banks	4%	Negative Determination with conditions (NDWC)	216.3 (a) (2)
	a. Training in cereal bank management (financial mgt, storage mgt) (7 days)	Agadez, Tahoua, and Tilab.	Villages	TBD	Persons		Negative Determination (ND)	216.3 (a) (3)
	b. Management in Recycling (4 days)	Agadez, Tahoua, and Tilab.	Villages	TBD	Persons		Negative Determination (ND)	216.3 (a) (3)
	c. construction/rehabilitation of warehouse	Agadez, Tahoua, and Tilab.	Villages	TBD	Banks		Negative Determination with conditions (NDWC)	216.3 (a) (2)
	d. Supply of initial stocks	Agadez, Tahoua, and Tilab.	Villages	TBD	Stock		Negative Determination (ND)	216.3 (a) (3)
	e. Rehabilitation of stocks for existing banks	Agadez, Tahoua, and Tilab.	Villages	TBD	Banks		Negative Determination (ND)	216.3 (a) (3)
	f. Establishment of a regular monitoring system of cereal banks	Agadez, Tahoua, and Tilab.	Villages	TBD	Banks		Categorical Exclusion (CE)	216.2 (c) (2)
	1.2.3. Training of community leaders in conflict management	Agadez, Tahoua, and Tilab.	Villages	TBD	Person	3%	Categorical Exclusion (CE)	216.2 (c) (2)
	a. Training of traditional chiefs : Module 1 : on land tenure Module 2 : on their role in decentralization Module 3 : on communal development activities Module 4 : on confluent techniques	Agadez, Tahoua, and Tilab.	Villages	TBD	Persons		Categorical Exclusion (CE)	216.2 (c) (2)
	b. Training of communal councillors on conflict management techniques	Agadez, Tahoua, and Tilab.	Villages	TBD	Person		Categorical Exclusion (CE)	216.2 (c) (2)
	c. training of VMC and FSC on conflict resolution techniques	Agadez, Tahoua, and Tilab.	Villages	TBD	Person		Categorical Exclusion (CE)	216.2 (c) (2)
	d. Trainings of staff	Agadez, Tahoua, and Tilab.	Villages	44	Person		Categorical Exclusion (CE)	216.2 (c) (2)
IR 1.3. Safety net and emergency aid programs that vulnerable households need to build and avoid asset erosion strengthened.	1.3.1 Strengthen local capacity to design and execute FFW community-based activities					3%		

Intermediate Results	Activities	Location	Site	Scale and Quantity	Unit	% of Title II	Expected IEE Determination	Reg. 216 Citation
	a. Training of FSC on FFT Strategy	Agadez, Tahoua, and Tilab.	Villages	1960	Person		Categorical Exclusion (CE)	216.2 (c) (2)
	b. Recycling of FSCs on FFT strategy	Agadez, Tahoua, and Tilab.	Villages	1960	Person		Categorical Exclusion (CE)	216.2 (c) (2)
	1.3.2. Provide punctual aid to vulnerable groups identified through the community based early warning and emergency response system. SCAP/RU	Agadez, Tahoua, and Tilab.	Villages	TBD	Households	4%	Negative Determination (ND)	216.3 (a) (3)
	a. Establishment of an emergency stock	Agadez, Taoua, and Tilab.	Villages	140	Village		Negative Determination with conditions (NDWC)	216.3 (a) (2)
	b. identification of affected Households	Agadez, Tahoua, and Tilab.	Villages	140	Village		Categorical Exclusion (CE)	216.2 (c) (2)
	c. Monitoring of works	Agadez, Tahoua, and Tilab.	Villages	140	Village		Negative Determination (ND)	216.3 (a) (3)

SO2: Enhance and protect livelihood strategies by sustainable improvements in agricultural, livestock and natural resource management practices

Intermediate Results	Activities	Location	Site	Scale and Quantity	Unit	% of Title II	Expected IEE Determination	Reg. 216 Citation
R I 2.1: Community capacity for sustainable increases in livestock productivity improved	2.1.1 Improve Animal Health and Production					3%		
	a. Training of community assistant livestock specialist (2/villages) feeding salts to animals	Agadez, Tahoua, and Tilab.	Villages	280	trainees		Negative Determination (ND)	216.3 (a) (3)
	b. Training in folder production and supply of improved folder seed	Agadez, Tahoua, and Tilab.	Villages	140	Leader Farmer		Negative Determination (ND)	216.3 (a) (3)
	c. Establishment of animal feed and input banks	Agadez, Tahoua, and Tilab.	Villages	600	tons		Negative Determination with conditions (NDWC)	216.3 (a) (2)
	e. training of CBO in animal health	Agadez, Tahoua, and Tilab.	Villages	280	trainees		Negative Determination with conditions (NDWC)	216.3 (a) (2)
	f. Establishment of animal health units	Agadez, Tahoua, and Tilab.	Villages	280	People		Negative Determination with conditions (NDWC)	216.3 (a) (2)
	2.1.2 Improve Technologies and Security of Livestock Production					3%		
	a. Supply of animals stock for breeding and/or fattening (n = villages)	Agadez, Tahoua, and Tilab.	Villages	5600	Herd.		Negative Determination (ND)	216.3 (a) (3)
	b. Promotion of animal by-products : milk, cheese, hide and leather (n = trainees)	Agadez, Tahoua, and Tilab.	Villages	1500	People		Negative Determination with conditions (NDWC)	216.3 (a) (2)
	c. Exchange visits (n = groups)	Agadez, tahoua, and Tilab.	Villages	TBD	Groups		Categorical Exclusion (CE)	216.2 (c) (2)
	d. Training of blacksmiths for the fabrication of traditional farming tools	Agadez, Tahoua, and Tilab.	Villages	50	Artisans		Negative Determination with conditions (NDWC)	216.3 (a) (2)
IR 2.2: Community capacity for sustainable increases in crop productivity enhanced	2.2.1 Improve crop production and NRM practices					3%		
	a. Sensitization and training on natural resources protection techniques (soil conservation, plant protection) (n = #trainees)	Agadez, Tahoua, and Tilab.	Villages	TBD	Persons		Categorical Exclusion (CE)	216.2 (c) (2)
	b. Training for the production of compost and utilization of organic and mineral fertilizers (n = # trainees)	Agadez, Tahoua, and Tilab.	Villages	TBD	Person		Negative Determination with conditions (NDWC)	216.3 (a) (2)
	c. Establishment of input banks (n = # villages)	Agadez, Tahoua, and Tilab.	Villages	TBD	Banks		Negative Determination	216.3 (a) (2)

Intermediate Results	Activities	Location	Site	Scale and Quantity	Unit	% of Title II	Expected IEE Determination with conditions (NDWC)	Reg. 216 Citation
	e. Training of community plant protection assistants (IPM) (n = trainees)	Agadez, Tahoua, and Tilab.	Villages	140	villages		Negative Determination (ND)	216.3 (a) (3)
	f. Training on agricultural techniques (seeding, cultivation, plant rotation, fertilization)	Agadez, Tahoua, and Tilab.	Villages	120	HA		Negative Determination (ND)	216.3 (a) (3)
	2.2.2 Promotion more diversified crop production systems					3%		
	a. Supply of improved seeds (n = villages)	Agadez, Tahoua, and Tilab.	Villages	TBD	HA		Negative Determination (ND)	216.3 (a) (3)
	b. Promotion of vegetable gardening in collaboration with ICRISAT	Agadez, Tahoua, and Tilab.	Villages	TBD	Garden		Negative Determination with conditions (NDWC)	216.3 (a) (2)
	c. Training on fruit trees production and management of nurseries	Agadez, Tahoua, and Tilab.	Villages	TBD	Farmers		Negative Determination (ND)	216.3 (a) (3)
	d. Promotion of date palm and arabic gum (<i>acacia Senegal</i> and <i>acacia seya</i>) production in river basins	Agadez, Tahoua, and Tilab.	Villages	TBD	HA		Negative Determination with conditions (NDWC)	216.3 (a) (2)
IR 2.3:Community initiatives to strengthen natural resource management strengthened	2.3.1 Adopt modern techniques to protect their environment					3%		
	a. Creation and training of environmental protection committee (n= committees)	Agadez, Tahoua, and Tilab.	Villages	140	Committee		Categorical Exclusion (CE)	216.2 (c) (2)
	b. Stone dikes (n = villages)	Agadez, Tahoua, and Tilab.	Villages	TBD	HA		Negative Determination with conditions (NDWC)	216.3 (a) (2)
	c. half moons	Agadez, tahoua, and Tilab.	Villages	TBD	HA		Negative Determination with conditions (NDWC)	216.3 (a) (2)
	d. Mechanical protection of rivers basins with stone dikes (n = basins)	Agadez, tahoua, and Tilab.	Villages	TBD	HA		Negative Determination with conditions (NDWC)	216.3 (a) (2)
	2.3.2 Promote tree production					3%		
	a. Training in seedling production (n = trainees)	Agadez, Tahoua, and Tilab.	Villages				Negative Determination with conditions (NDWC)	216.3 (a) (2)
	b. Production of seedlings by villagers (n = villages)	Agadez, tahoua, and Tilab.	Villages	140	Nurseries		Negative Determination with conditions (NDWC)	216.3 (a) (2)

Intermediate Results	Activities	Location	Site	Scale and Quantity	Unit	% of Title II	Expected IEE Determination	Reg. 216 Citation
	c. Biological protection of river basins with trees (n = basins)	Agadez, Tahoua, and Tilab.	River Stream	TBD	HA		Negative Determination with conditions (NDWC)	216.3 (a) (2)
	d. Trenches and small dikes for water retention and greening	Agadez, Tahoua, and Tilab.	Villages	TBD	HA		Negative Determination with conditions (NDWC)	216.3 (a) (2)
	e. Fixation of sand dunes	Agadez, Tahoua, and Tilab.	Villages	TBD	HA		Negative Determination with conditions (NDWC)	216.3 (a) (2)
	d. Protection system against bush fire	Agadez, Tahoua, and Tilab.	Villages	TBD	HA		Negative Determination (ND)	216.3 (a) (3)
	g. Training in community management and protection of natural forest and resources (n = villages)	Agadez, Tahoua, and Tilab.	Villages	140	Committees		Negative Determination (ND)	216.3 (a) (3)
IR 2.4: Availability and Access to water sources for livestock and small-scale irrigation is increased	2.4.1 Rehabilitation and construction of water supply infrastructure					4%		
	a. Rehabilitation and reforestation of lake beds	Agadez, Tahoua, and Tilab.	Villages	TBD	HA		Negative Determination with conditions (NDWC)	216.3 (a) (2)
	b. Construction of water harvesting sill	Agadez, Tahoua, and Tilab.	Villages	TBD	HA		Negative Determination with conditions (NDWC)	216.3 (a) (2)
	c. Rehabilitation and construction of wells for small scale irrigation, gardening and animals	Agadez, Tahoua, and Tilab.	Villages	560	Wells		Negative Determination with conditions (NDWC)	216.3 (a) (2)
	d. Training of Well Committee members	Agadez, Tahoua, and Tilab.	Villages	420	Groups		Categorical Exclusion (CE)	216.2 (c) (2)

AG: Agriculture Specialist; DLS: Departmental Livestock Service; FA: FSC: Food Security Committee; DAS: Departmental Agricultural Service; DHS: Departmental Health Service; NS: Nutrition Specialist; GR: Rural Engineer; MCS: Marketing and Credit Specialist; .

SO3: Build human capacity by strengthening community based health and nutrition systems, HIV/AIDS Awareness and Prevention

Intermediate Results	Activities	Location	Site	Scale and Quantity	Unit	% of Title II	Expected IEE Determination	Reg. 216 Citation
IR3.1.: Capacity of health structures to support community based health and nutrition programs, HIV/AIDS Awareness and Prevention is strengthened.	3.1.1 : Health District Worker Training					3%		
	a. Evaluate the quality of nutrition services in the CS land health post	Agadez	CSI Health post	5CSI 10 health center				
	b. Create a more trained nutrition trainers in each health center	Agadez, Tahoua, and Tilab.	Villages	TBD	Forms		Categorical (CE) Exclusion	216.2 (c) (2)
	c. Train and retrain health workers on the design and monitoring of community based rehabilitation programs of moderately malnourished children	Agadez, Tahoua, and Tilab.	Villages	90	Persons		Categorical (CE) Exclusion	216.2 (c) (2)
	d. Train and retrain health agents on growth monitoring	Agadez, Tahoua, and Tilab.	Villages	300	Trainees		Categorical (CE) Exclusion	216.2 (c) (2)
	e. Train and retrain health agents in one-on-one counseling techniques	Agadez, Tahoua, and Tilab.	Villages	300	Trainees		Categorical (CE) Exclusion	216.2 (c) (2)
	f. Equip all health centers and health posts servicing project intervention villages with the basic training module, supervision and monitoring tools and "aides memories"		Villages	TBD	Kits		Categorical (CE) Exclusion	216.2 (c) (2)
	g. Train/Recycle peer trainers on HIV/AIDS/STD	Agadez, Tahoua, and Tilab.	Villages	TBD	Persons		Categorical (CE) Exclusion	216.2 (c) (2)
	h. Distribute condoms in Arlit to sex workers	Agadez, Tahoua, and Tilab.	Arlit	TBD	Codoms		Negative Determination (ND)	216.3 (a) (3)
	3.1.2 Health District Community Outreach (foraines)					3%		
	a. Train/Recycle animators on growth monitoring	Agadez, Tahoua, and Tilab.	Villages	50	Persons		Categorical (CE) Exclusion	216.2 (c) (2)
	b. Train EVN, EVS and TBA in growth monitoring	Agadez, Tahoua, and Tilab.	Villages	300	Persons		Categorical (CE) Exclusion	216.2 (c) (2)

Intermediate Results	Activities	Location	Site	Scale and Quantity	Unit	% of Title II	Expected IEE Determination	Reg. 216 Citation
	c. Train animators in individual counseling techniques	Agadez, Tahoua, and Tilab.	Villages	25	Persons		Categorical Exclusion (CE)	216.2 (c) (2)
	d. Train animators EVN, EVS and TBA in individual counseling techniques	Agadez, Tahoua, and Tilab.	Villages	TBD	persons		Categorical Exclusion (CE)	216.2 (c) (2)
	e. Train and recycle TBA/EVS in CPN, ANJE, breastfeeding, feeding of lactating mothers and equip TBAs	Agadez, Tahoua, and Tilab.	Villages	TBD	TBD		Negative Determination (ND)	216.3 (a) (3)
	f. Equip TBA of new villages	Agadez, Tahoua, and Tilab.	Villages	TBD	Kits		Negative Determination (ND)	216.3 (a) (3)
	g. Equip new villages with growth monitoring tools	Agadez, Tahoua, and Tilab.	Villages	85	Kits		Negative Determination (ND)	216.3 (a) (3)
	h. Support growth monitoring of children 0-36 moths and pregnant mothers	Agadez, Tahoua, and Tilab.	Villages	TBD	Persons		Negative Determination (ND)	216.3 (a) (3)
	i. Supply iron and Vitamin A to mothers	Agadez, Tahoua, and Tilab.	Villages	TBD	Tablets		Negative Determination (ND)	216.3 (a) (3)
	3.1.3. Community Capacity Building	Agadez, Tahoua, and Tilab.	Villages	TBD	sessions	3%	Negative Determination (ND)	216.3 (a) (3)
	a. Training/recycle animators in FARN	Agadez, Tahoua, and Tilab.	Villages	50	Trainees		Categorical Exclusion (CE)	216.2 (c) (2)
	c. Conduct FARN sessions	Agadez, Tahoua, and Tilab.	Villages	TBD	Sessions		Negative Determination (ND)	216.3 (a) (3)
	d. Distribute food to children admitted to the FARN	Agadez, Tahoua, and Tilab.	Villages	TBD	Children		Negative Determination (ND)	216.3 (a) (3)
IR3.2: The Health and nutrition status of women and children under five and HIV/AIDS awareness and prevention is improved	3.2.1 Health and Nutrition education awareness training and prevention					3%		
	a. Train and retrain extension workers in GRAAP methodologies and equip them in training materials	Agadez, Tahoua, and Tilab.	Villages	TBD	trainees		Categorical Exclusion (CE)	216.2 (c) (2)

Intermediate Results	Activities	Location	Site	Scale and Quantity	Unit	% of Title II	Expected IEE Determination	Reg. 216 Citation
	b. Train and retrain extension workers, EVS, EVN, and traditional birth attendants on nutrition, health, and the prevention of CCC/IST/SID	Agadez, Tahoua, and Tilab.	Villages	TBD	Group		Categorical (CE) Exclusion	216.2 (c) (2)
	c. Organize mass public awareness (IEC) campaigns (radio, songs, theater, demonstrations) on nutrition and health and the prevention of IST	Agadez, Tahoua, and Tilab.	Districts	TBD	beneficiaries		Categorical (CE) Exclusion	216.2 (c) (2)
	e. Cooking demonstrations and radio programs through the EVN and EVS	Agadez, Tahoua, and Tilab.	Villages	50	beneficiaries		Categorical (CE) Exclusion	216.2 (c) (2)
	f. Train/Recycle peer trainers		Villages	TBD	trainers		Categorical (CE) Exclusion	216.2 (c) (2)
	g. Train health workers and work through them to deliver condoms to professional sex workers in the mining town of Arlit	Agadez, Tahoua, and Tilab.	Villages	TBD	Agents		Categorical (CE) Exclusion	216.2 (c) (2)
	3.2.2 Growth Monitoring and counseling					3%		

Intermediate Results	Activities	Location	Site	Scale and Quantity	Unit	% of Title II	Expected IEE Determination	Reg. 216 Citation
	a. Train and retrain government and communal health workers, EVN, EVS and traditional birth attendants on growth monitoring and individual counseling techniques	Agadez, Tahoua, and Tilab.	Agadez, Tila	TBD	Partners TBD		Categorical Exclusion (CE)	216.2 (c) (2)
	b. Monitor the growth of children 0-36 months of age	Agadez, tahoua, and Tilab.	Villages	140	villages		Categorical Exclusion (CE)	216.2 (c) (2)
	c. Equip villages with the basic equipment they need to organize health monitoring especially scales	Agadez, Tahoua, and Tilab.	Villages	140	Village		Categorical Exclusion (CE)	216.2 (c) (2)
	d. Train and retrain traditional birth attendants on pre-natal counseling, feeding and nutrition of children, breastfeeding support, nutrition for pregnant and nursing women, prevention of CCC/IST/VIH/SID and provide them with basic equipment	Agadez, Tahoua, and Tilab.	Villages	TBD	peer trainers		Negative Determination (ND)	216.3 (a) (3)

Intermediate Results	Activities	Location	Site	Scale and Quantity	Unit	% of Title II	Expected IEE Determination	Reg. 216 Citation
	e. Distribute iron supplements to pregnant women and vitamin A to post partum women	Agadez, Tahoua, and Tilab.	Health Centers	TBD	Agents			
	3.2.3 FARNs					2%		
	a. Conduct FARNs in villages where the growth monitoring program identifies a need	Agadez, Tahoua, and Tilab.	Villages	TBD	Committees		Categorical Exclusion (CE)	216.2 (c) (2)
IR3.3.: Access to potable drinking water is increased	3.3.1 Construction/rehabilitation of wells					4%		
	a. Construct/rehabilitate potable water points	Agadez, Tahoua, and Tilab.	Villages	72	Wells		Negative Determination with conditions (NDWC)	216.3 (a) (2)
	3.3.2. Creation of Water Management Committee (WMC)s	Agadez, Tahoua, and Tilab.	Villages	420	groups		Categorical Exclusion (CE)	216.2 (c) (2)
	a Train WMC	Agadez, Tahoua, and Tilab.	Villages	TBD	Sessions		Categorical Exclusion (CE)	216.2 (c) (2)
	b. Conduct IEC on hygiene and management of potable water points	Agadez, Tahoua, and Tilab.	Villages	TBD	Sessions		Categorical Exclusion (CE)	216.2 (c) (2)

WMC: Water management Committee

S04: Reduce vulnerability to risk and shocks by diversifying household income earning opportunities

	Activities	Location	Site	Scale and Quantity	Unit	% of Title II	Expected IEE Determination	Reg. 216 Citation
IR 4.1. Community-level marketing systems are strengthened	4.1.1 Community-level marketing systems are strengthened					3%		
	a. Collect and disseminate price information on local, regional and international markets	Agadez, Tahoua, and Tilab.	Villages	TBD	persons		Categorical (CE) Exclusion	216.2 (c) (2)
	b. Identify new market opportunities	Agadez, Tahoua, and Tilab.	Villages	TBD	Visits		Categorical (CE) Exclusion	216.2 (c) (2)
	4.1.2. Assist community based organizations in transforming and marketing their local products					3%		
	a. Sensitization and organization of producers on marketing issues	Agadez, tahoua, and Tilab.	Villages	TBD	Persons		Categorical (CE) Exclusion	216.2 (c) (2)
IR4.2: Better transformation, conservation, AGR management techniques are adopted	b. Training on packaging and marketing techniques (n= groups)	Agadez, Tahoua, and Tilab.	Villages	TBD	Groups		Categorical (CE) Exclusion	216.2 (c) (2)
	c. construction of modern storage facilities	Agadez, Tahoua, and Tilab.	Villages	TBD	Village		Negative Determination with conditions (NDWC)	216.3 (a) (2)
	4.2.1. Train local community organizations in value added food processing techniques for local products					3%		
	a. Training workshops on transformation techniques	Agadez, Tahoua, and Tilab.	Villages	TBD	Workshops		Categorical (CE) Exclusion	216.2 (c) (2)
	b. Exchange visits to centers of excellence (n = visits)	Agadez, Tahoua, and Tilab.	Villages	TBD	visits		Categorical (CE) Exclusion	216.2 (c) (2)
RI4.3. Community access to financial services for micro-enterprise development is enhanced	4.2.2 Increase local organizations access to appropriate transformation processes and equipment					2%		
	a. Train and support local artisans in the fabrication of processing equipments (n = artisans)	Agadez, Tahoua, and Tilab.	Villages	TBD	Artisans		Negative Determination with conditions (NDWC)	216.3 (a) (2)
	b. Train in the utilization of and Supply to Community Based-organizations (CBOs) of appropriate equipments (dryers, improved cookers) (n = CBOs).	Agadez, Tahoua, and Tilab.	Villages	TBD	CBO		Negative Determination (ND)	216.3 (a) (3)
	4.3.1. Strengthen the organizational capacity of local organizations to manage IGAs					3%		

Activities	Location	Site	Scale and Quantity	Unit	% of Title II	Expected IEE Determination	Reg. 216 Citation
a. Create CBOs	Agadez, Tahoua, and Tiliab.	Villages	TBD	CBO		Categorical Exclusion (CE)	216.2 (c) (2)
b. Restructure existing CBOs	Agadez, Tahoua, and Tiliab.	Villages	60	CBO		Categorical Exclusion (CE)	216.2 (c) (2)
c. Strengthen the managerial capacity of Credit Management Committee (CMC) members (n = CMC)	Agadez, Tahoua, and Tiliab.	Villages	60	CMC		Categorical Exclusion (CE)	216.2 (c) (2)
4.3.2 Establish an internal system for financing IGAs					2%		
a. Elaborate the installation methodology of the new credit system	Agadez, Tahoua, and Tiliab.	Villages	1	Study		Categorical Exclusion (CE)	216.2 (c) (2)
b. Sensitization of villagers on saving and rotative credit system (n = Villages)	Agadez, Tahoua, and Tiliab.	Villages	145	Villages		Categorical Exclusion (CE)	216.2 (c) (2)
c. Financing of Income Generating Activities (IGAs) (n= =villages)	Agadez, Tahoua, and Tiliab.	Villages	TBD	IGA		Negative Determination (ND)	216.2 (c) (2)
4.3.3 Create Village saving and credit fund (VSCF)					2%		
a. Develop operating links between efficient villages groups and associations	Agadez, Tahoua, and Tiliab.	Villages	TBD	Village		Categorical Exclusion (CE)	216.2 (c) (2)
b. Establish VSCFs	Agadez, Tahoua, and Tiliab.	Villages	TBD	Committee		Categorical Exclusion (CE)	216.2 (c) (2)
c. Support the operation of VSCF by organization training sessions	Agadez, Tahoua, and Tiliab.	Villages	TBD	Workshops		Categorical Exclusion (CE)	216.2 (c) (2)
4.3.4 Create VSCF Unions					3%		
a. Review VSCF system and existing credit framework and propose an approach to the establishment of Credit Union	Agadez, Tahoua, and Tiliab.	Villages	1	Study		Categorical Exclusion (CE)	216.2 (c) (2)
b. Support the establishment of functioning structures	Agadez, Tahoua, and Tiliab.	Villages	TBD	Village		Categorical Exclusion (CE)	216.2 (c) (2)
c. Support to the technical coordination and supervision unit	Agadez, Tahoua, and Tiliab.	Villages	1	Unit		Categorical Exclusion (CE)	216.2 (c) (2)
d. Recruit a financial and technical partner to supervise the Union and its operations	Agadez, Tahoua, and Tiliab.	Villages	1	Partner		Categorical Exclusion (CE)	216.2 (c) (2)
Monitoring and Evaluation: Monitor Mitigating measures with partners and communities	Agadez, Tahoua, and Tiliab.	Villages		Partner & Communities	10%	Categorical Exclusion (CE)	216.2 (c) (2)
			Total		100%	Categorical Exclusion (CE)	216.2 (c) (2)

MCS: Marketing and Credit Specialist; CMC: Credit Management Committee; CBO: Community Based-Organization; VSCF: Village Saving and Credit Fund; IGA: Income Generating Activities.

ATTFSI – Environmental Monitoring and Evaluation Guidelines

1. Introduction

1.1 Background

Africare's Agadez, Tahoua, and Tillaberi Food Security Initiative (ATTFSI), seeks to enhance villagers ability to manage their food insecurity, identify and address risk. Specific objectives include increased food production and availability throughout the year, to combat food insecurity and reduce malnutrition. Interventions in water development, livestock and food production, and nutrition will take place in 80 new villages with consolidation in 60 old villages as needed. Wells will be rehabilitated and/or constructed to support agricultural production, livestock management, and nutrition activities.

The project zones are considered a fragile environment with extensive land degradation, deforestation and scarcity of water; also by national standards, it is a "highly food insecure area." Because these proposed interventions in water development and food production could potentially jeopardize this fragile system, the Initial Environmental Examination has identified some measures to mitigate any negative impacts. This document provides basic guidelines for monitoring and evaluating environmental indicators. It will assist ATTFSI monitoring and evaluation team in assessing project intervention at pre and post situations.

1.2 Objectives

The broad objective of the environmental monitoring system is to provide basic information for the staff including (project managers, trainers and field agents) and beneficiaries on changes of environmental factors resulting from interventions associated with improved livestock management, increased agricultural production and water development schemes.

Specific objectives include:

- Provide qualitative and quantitative data and information on selected environmental components likely to be affected by activities such as agriculture production, livestock production, and water development.
- To review the implications of those activities on natural resource management and on the environment and to develop options for more efficient management.
- To examine effects of impacts of project activities and their derived demands on the natural resource base.
- To assess present status of resource availability, roles of resource use and current impact of this use on resource activity.
- To promote concepts of sustainable management and protection of the natural resource base of Agadez, Tahoua, and Tillaberi.
- To create a data base on selected environmental parameters of the 40 new villages and 60 old villages that would be useful for future use by other ATTFSI activities and partners.

2. Methodology

Environmental monitoring is important to generate information that will contribute to efficient management of activities. The monitoring system will also contribute to facilitate appropriate changes in project planning, design, and implementation processes where environmental impacts are likely to be of concern in the course of implementation.

This environmental monitoring provides regular information to project staff regarding impacts of the various interventions in agriculture, water development, and animal production on the environment of the 80 new villages and 60 old villages where these interventions will take place.

The environmental impacts will be measured using field surveys that will assess changes over time (some monthly, some quarterly, yearly, etc.) both positive and negative. The positive and negative changes will be measured by analyzing the qualitative and quantitative changes in selected indicators during pre and post intervention situations.

3. ATTFSI II Activities

The major activities that will be monitored for analyzing their impacts include:

1. Soil and water conservation practices;
2. Water supply development;
3. Agricultural production;
4. Livestock production;
5. Hygiene and Sanitation.

3.1. Soil and Water conservation practices

1. Objective of the activity

By the end of FY 11, soil erosion measures will be implemented in cultivable and non-cultivable lands through the construction of soil conservation and erosion control structures.

2. Rationale for monitoring and evaluation

Soil and water conservation practices are interventions, which serve to mitigate impacts of agricultural production and to mitigate existing environmental problems. The key is to prevent further degradation and to monitor how well these interventions are working.

3.1.1 Monitoring and Evaluation Summary Table: Soil and water conservation practices

Expected Environmental Results (after mitigation)	Environmental Indicators	Environmental baseline data	Activities
1. Soil erosion measures will be implemented in ha of cultivable and non-cultivable lands 2. Appropriate soil and conservation structures constructed or rehabilitated according to specific standards: <ul style="list-style-type: none"> • Soil bund; • stone bund; • vegetation of stone bunds 	Total (ha) for each technique used: <ul style="list-style-type: none"> - Soil bund; - Stone bund; - windbreaks; - river basins. # of training and the themes covered; <ul style="list-style-type: none"> • # of farmers trained and skills acquired on different soils and water conservation techniques; 	<ul style="list-style-type: none"> • Approximate # of (ha) of cultivable and non-cultivable lands that could be used for application of techniques; • inventory of techniques already used by farmers; • total ha where these techniques have been already used; • # of households where the techniques are used; 	<ul style="list-style-type: none"> • Draw community action plan; • mobilization of village leaders; • conduct training sessions; • provision of tools, equipment and other inputs such as seedlings, etc;

with selected species of trees and/or grass; • windbreaks/contour strips; • canals/ridges; • grass cover. 3. Farmers trained in various soil and water conservation techniques. 4. Selected species of trees planted to increase infiltration of runoff water into the ground. 5. Plots selected for rehabilitation via Farmer managed Natural Regeneration*	• # of households who have adopted at least one technique on their own; • depth of water table; • Percolation rate of water.	• depth of water table; initial percolation rate of eater	• periodic monitoring and evaluation visits to fill out data collection forms
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*It is notable that despite common challenges of dryland Niger, thousands of households (HH's) have coped due to their investments in such technologies as Farmer-Managed Natural Regeneration (FMNR) and various soil water conservation measures (zais, demi-lunes, etc.) Through the use of these technologies, farmers diversified their HH economies and avoided some consequences. The following study in the Niger Zinder region assessed the impact of Farmer Managed Natural Regeneration efforts on local livelihoods, and aimed to assess what motivates farmers to protect and manage trees. Refer to the study report "Niger: Etude de la régénération naturelle assistée dans la région de Zinder (Niger): Une première exploration d'un phénomène spectaculaire", located at:
http://www.frameweb.org/ev_en.php?ID=17529_201&ID2=DO_TOPIC

3.2. Water supply development

1. Objective of the activity/intervention

By the end of FY 11, reduce shortage of water available for farming and shortage of potable water through rehabilitation and/or digging of 70 agricultural wells, 15 lakebeds and 60 potable water wells.

3.2.1 Monitoring and Evaluation Summary Table: Water supply development

Expected Environmental Results (after mitigation)	Environmental Indicators	Environmental baseline data	Activities
1. Rehabilitate well 2. Rehabilitate lakebeds 3. Committee to maintain and protect wells 4. Train staff in water scheme maintenance (e.g. pumps, gardens etc.) 5. Rehabilitate newly built trails 6. Build access area for livestock	• # of functional wells • # wells with bacterial and or arsenic contamination • Duration of water supply interruption • # of people trained and skills acquired in water schemes maintenance •	• # of existing wells ; • other existing sources of water (ponds, forage, etc.); • Types of water pumping system (manual, solar, electricity, etc.); • Existing access trails; • Existing drinking area for livestock; • Water schemes utilization; • Existing water committee	• Action plan; • Recruit relevant staff and laborers; • Provide tools and equipment and other inputs; • Conception plan for wells construction; • Training; • Rehabilitation/construction of wells; • Form water committee; • Periodic monitoring and evaluation

3.3 Improved Agricultural Productivity

1. Objective of the activity

By the end of FY 11, increase food production to increase incomes and combat malnutrition.

2. Rationale for monitoring and evaluation

Increased agricultural activity will have the following impacts which would require appropriate agricultural techniques to alleviate those impacts: decreased soil fertility, pests, erosion, etc.

3.3.1 Monitoring and Evaluation Summary Table: Improved Agricultural Productivity

Expected Environmental Results (after mitigation)	Environmental Indicators	Environmental baseline data	Activities
<ol style="list-style-type: none"> 1. Established demonstration farms 2. Farmers are trained in new and appropriate farming techniques 3. ___(#) and types of new techniques adopted 4. Households adopt production of new crops and earn income 5. species of improved seeds introduced that survived 6. Appropriate tools available for farming 7. Integrated pest management program 8. Committee formed for agricultural production 	<ul style="list-style-type: none"> • # of functioning (producing) and non-functioning (non-producing) demonstration farms; • # of farming techniques introduced (contour planting, compost, etc.); • # of training and the themes covered; • # of farmers trained and skills acquired on different farming techniques; • # of households who have adopted at least one technique on their own; • ___(#) and species of new crop introduced for nitrogen fixing; • ___(#) and species of new crops introduced for phosphate; • # and types of tools provided (axe, hoe, etc.) 	<ul style="list-style-type: none"> • Farmers who want to be trained • Techniques currently used • # of households and techniques used • # of households with vegetable garden • # of households who use improved seeds • specific pest crops problems • biological pest control and type of crops 	<ul style="list-style-type: none"> • Action plan; • Mobilization; • Site identification; • Training; • Purchase of improved seeds; • Distribution of improved seeds; • Purchase and distribution of appropriate tools • Technical assistance of ICRISAT*

*ATTFSI will continue to promote the control of pest infection of crops by enhancing this system in Agadez and developing the same in Tahoua and Tillaberi. ATTFSI will work with the Divisional Agricultural services to train farmers in farming techniques such as composting, crop rotation, which at the same time will improve soil fertility. Improved and local varieties of seeds for vegetables will be promoted with the technical assistance of ICRISAT. Partnership will be set up with ICRISAT for the promotion of tree planting activities, agro-forestry techniques. . Africare will also work with ICRISAT to establish tree nurseries and to promote nitrogen-fixing trees planting and fruit trees production. This partnership will include procurement of seeds and training of the producers.

3.4 Livestock Production

1. Objective of the activity

By the end of FY 1, increase livestock production to increase incomes and improve nutrition by making more protein available for consumption.

2. Rationale for monitoring and evaluation

Livestock production can have the following environmental impacts such as destruction of agricultural crops, loss of vegetation by overgrazing, destruction of tree seedlings and trees, soil erosion, introduction of livestock diseases, pollution of water resources contamination of drinking water sources due poor sanitary maintenance during any co-use of wells by both animals and humans.

Properly managed, livestock production can enhance land and water quality, biodiversity, and social and economic well-being. However, when improperly managed, livestock production may cause significant economic, social and environmental damage as above. As described in the Livestock Production chapter of the USAID Bureau for Africa's Environmental Guidelines for Small Scale Activities in Africa (EGSSAA) (http://www.encapfrica.org/EGSSAA/Word_English/livestock.doc).

Monitoring and Evaluation Summary Table: Livestock Production

Expected Environmental Results (after mitigation)	Environmental Indicators	Environmental baseline data	Activities
1 Better sanitation 1. Increase in diversity of plant species used for animal forage 2. Increase in vegetation cover 3. Farmers trained in livestock production techniques 4. Committee formed for livestock production and management 5. Appropriate Use of manure for compost, application in zai (better manure management) 6. Integrated pest management program 7. Sanitary practices for livestock watering to avoid well contamination	<ul style="list-style-type: none"> • # of animals treated (vaccination, deworming, etc.); • # of species of trees and type of grass cover planted; • # of training and the themes covered; • # of farmers trained and skills acquired on different livestock production and sanitation techniques (including well contamination); • # of households who have adopted at least one technique on their own; • Committee formed for livestock production; • Less manure openly available by sight 	<ul style="list-style-type: none"> • # of animals and their species; • species of bushes/trees used for forage; • techniques already used to manage/raise/produce livestock; • # of households that practice those techniques; • Existing livestock sanitation infrastructure; • Utilization of the livestock production 	<ul style="list-style-type: none"> • Action plan; • Mobilization of village leaders; • Conduct training sessions; • Provision of tools, equipment and other inputs such as vaccinations, antibiotics, etc.; • Periodic monitoring and evaluation visits to fill out data collection forms

3.5 Nutrition and hygiene education

1. Objective of the activity

By the end of FY 11, decrease prevalence of malnutrition, waterborne diseases (i.e. diarrhea), reduce time spent in fetching water and introduce new food processing techniques.

2. Rationale for monitoring and evaluation

Firewood is used for food processing and cooking nutritional meals. Also, water quality should be tested for the purpose of controlling diarrhea diseases which are an obstacle to children's growth.

3.5.1 Monitoring and Evaluation Summary Table: Nutrition and hygiene education

Expected Environmental Results (after mitigation)	Environmental Indicators	Environmental baseline data	Activities
1. Use energy efficient stoves	• # of training events and the themes	• # of households who use energy	• Action plan;

for food preparation and water treatment* 2. Solar energy used for food processing 3. Reduction in waterborne diseases 4. Nutrition and Sanitation Committee, Use of Sanitary Surveying** 5. Improved hygiene behaviors.	covered in food transformation processes; • # of women trained and skills acquired in different food processing techniques, and alternative water treatment methods that conserve energy; • # of households who use energy efficient stoves for food preparation; • # of hygiene and nutrition education sessions.	efficient stoves for food preparation; • # of households who use solar energy for food preparation and water treatment; • water treatment methods (boiling, filtering, etc.); • incidence of waterborne diseases. • Sanitary Surveys (• mobilization of village leaders; • conduct training sessions; • provision of equipment and other inputs; • hygiene and nutrition education campaigns; • periodic monitoring and evaluation visits to fill out data collection forms.
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* Promote both efficient fuel use (i.e., chopping wood, using lids, etc) and/or fuel-efficient stoves. For the former, an expert should train the FFP NGO, so they can incorporate the techniques into their program and institutionalize the messages/training (which is much less technical and labor intensive than promoting adoption of new stoves). Experience shows that it is labor intensive to get a cookstove program to work well, a full IEC campaign is needed. In the development of Energy components, CSs are strongly encouraged to refer to the USAID report: Fuel Efficient Stove Programs in IDP Setting- Summary Evaluation Report, Uganda for program design and monitoring and evaluation considerations.

http://www.usaid.gov/our_work/economic_growth_and_trade/energy/publications/EGAT0020.PDF

** Sanitary surveying formally identifies possible pollution problems which may threaten drinking-water quality at the source, point of abstraction, treatment works, or distribution system. It relies on the inspection of physical installations by an inspector or a team of inspectors. When visiting water-supply schemes, it is usually possible to spot any faults and deficiencies that could lead to the pollution of potable water. Sanitary surveying is an inspection technique that records such visible problems, enabling fieldworkers to assess the likely quality of the water, relative to other sources. Problems such as a woman collecting water from a stream which could be polluted by human excreta and urine, animal and domestic wastes, soaps and detergents, pesticides and fertilizers are readily identified. Refer to the Technical Briefs on Health, Water and Sanitation: "Sanitary Surveying" in the DFID-funded Technical Brief from the WEDC (The Water, Engineering and Development Centre) at Loughborough University in the UK (1999). <http://www.lboro.ac.uk/well/resources/technical-briefs/50-sanitary-surveying.pdf>